HOMEWORKER

The printer and the pendulum

by Henry Fersko-Weiss

Computer printer sales are beginning to hit their stride in mass market channels — and I think it's the call of the home office market that is primarily responsible for this activity. But regardless of the forces at play, the very perceptible swing of the pendulum in the direction of mass market retailers looks like it's gaining momentum. The good news for retailers goes beyond increased sales, to sales that bring in bigger dollars.

Here's a statistical synopsis of the story: In 1985, according to a Dataquest study, about 14 percent of the printers purchased for home use were sold by the combined efforts of department stores, electronics stores and office equipment and supply outlets. Last year, that same group captured a 21 percent share of the market. Two big benefactors have been the department store and office supply store.

Most exciting about this new interest in printers is that buyers are paying more. This needs some explanation. While prices for printers have been dropping, customers, particularly those shopping for the home office, are willing to pay more for better quality machines. Performance, it seems, has surpassed price as a primary concern among consumers who are buying computer printers. Bob Fennell, a senior analyst at Dataquest, says more home buyers than ever before are choosing computers that cost over $500.

I believe the same "buying-up" phenomenon is happening in the printer category. The $200 to $300 price range is still the hot button for mass merchants, and customers are getting better price performance for their hard-earned dollars. But, a growing number of home office workers are drawn to higher-end dot matrix printers in the $300 to $500 price range because they can get even better and more flexible performance. Such has been the experience of retailers like Mace Electronics and Federated.

"Home office buyers are opting for larger carriage size and letter quality printing, so they are willing to spend a little more," says Cindy Postalnick, Federated's senior buyer of home and office equipment. This may defy the norm in the topsy-turvy world of home electronics, but who's going to complain about healthy margins?

Mace Electronics in Erie, Pennsylvania is even moving a fair number of very expensive laser printers in the $3,000 to $7,000 range. While such high-ticket items are certainly new terrain for mass merchants, Mace reports that some 10 percent of its printer revenues now come from laser models. And sales vice president Frank Mehler believes this percentage could soon hit 30 to 40 percent. "It's our best area of growth at this point," he says.

But Mehler admits that high-end printers aren't easy to sell. "It's difficult to keep all our people informed in all the stores," he says. Because of this, Mace sells laser printers in only some of its stores. "This way the potential laser customer is better served."

Besides this new interest in printers from the growing homeworker ranks, there is a large pool of personal computer owners who have yet to buy a printer. Dataquest's Fennell notes that 15 percent of all U.S. households have a personal computer, yet only six percent of PC owners have a printer.

Retailers are witnessing an impressive new allegiance to printers: "When we sell a computer system now, 75 percent include a printer, whereas before only about 30 percent bought a printer," Mehler says. At California-based Federated's 68 stores the same phenomenon is in evidence. "Printer sales have really been developing for the past couple of years, but now we have the greatest potential for sales," Postalnick says. Sales of printers have been so good of late, the buyer adds, that the usual post-Christmas slowdown didn't materialize this year.

While the market appears ripe for selling printers, you'll need to carry a selection that covers all buyers' needs if you want to play the game seriously — and this can cost. Plus, you'll have to employ crack salespeople who are able to demonstate features and pinpoint customer needs. And, please, don't make displays look like a museum. Rather, invite customers to play with your merchandise by putting the machines up on stands. Printers can become an important part of your profit picture — if you play the game right. □

(Henry Fersko-Weiss regularly covers the home office market. A former editor for Personal Computing *magazine, he is a regular contributor to* U.S. News & World Report *and* MART*'s sister publication* Computer Dealer.

Editorial Feedback
Please circle the appropriate number on the Retailer Service Card. Do you sell computer printers?

YES—349 *NO—350*

Printer sales by retail channel

	1985	1986
Computer specialists	38%	37%
Department stores	8%	11%
Mail Order	14%	8%
Electronics stores	6%	6%
Discount stores	4%	6%
Direct from manufacturer	5%	6%
Office equipment stores	—	4%
Other	25%	22%

Source: Dataquest

RANDOM FILES

Silver Reed goes for fax

Silver Reed has changed its mind about marketing a Silver Seiko facsimile machine under its own name. Just a couple of months ago Dan Ferrazza, field sales manager, said the U.S. company didn't feel it could meet its parent company's quota at the price point it wanted to reach.

At the time, Northwestern Bell was haggling with Silver Seiko and a deal appeared to be in the making. Northwestern Bell even showed the machine at January CES in Las Vegas. But now Northwestern Bell is out, and the machine has been dropped in Silver Reed's court.

As it is presently configured the fax in question is a desktop machine without a telephone. It will handle only letter size paper, is only G3 compatible and operates at about two minutes per page. This doesn't exactly make it state-of-the-art. In fact, this is part of the reason Northwestern Bell finally said no.

"The only way for us to hit the price point we felt was necessary was to go with a low-speed modem and take out G2 compatibility — which meant it couldn't communicate with the 450,000 to 480,000 G2 machines still in use," explains Mark Gurvey, facsimile product manager at Northwestern Bell. "We didn't think we could be competitive."

William Sobieski, vice president of sales and marketing for Silver Reed hints that Northwestern Bell's problem was in its profit structure. But he admits that there is still a question about delivering the machine at what he considers the right retail price: $795. If Silver Reed could deliver the fax at that price, retailers would be buying it for around $600.

Why the sudden renewed interest in fax? The machine received very favorable reviews at the recent Hanover Fair in Europe. "The success at Hanover allows us to show it here at June CES to see what people think," Sobieski explains. Retailer feedback will have a lot to do with the final configuration, price and even whether or not the machine ever makes it out of the incubator. □

Sales of hand-held copiers

Are hand-held copiers just a fad or a novelty item? Look at the accompanying chart and judge for yourself. These mini-copiers are flowing steadily into the home office market, according to sales figures through April from three of the four suppliers in this category.

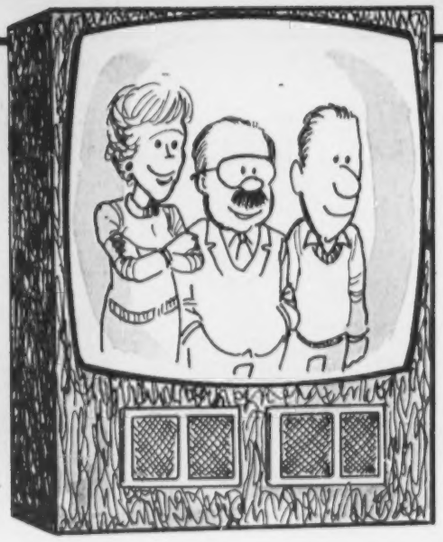
These manufacturers offer a variety of portable machines — from one that copies a single line of text to another model that copies a three-inch wide chunk of text.

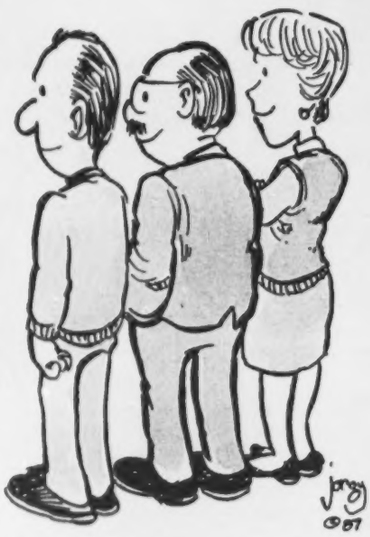
Since Sharp just began selling the Handy Copier in March its number is half sales and half projection. Plus USA has been in the market the longest — it began selling its Copy-Jack model last June. Plus USA's newest model, the Copy-Jack 96, is the most expensive mini-copier at $449.95 list.

Sharp's Handy Copier is the least expensive, listing at $189.99. □

Sharp - Handy Copier . . . . . **5,000 units**
Silver Reed - PortaCopy . . . . . **15,000 units**
Plus USA - Copy-Jack . . . . . **9,000 units**
Panasonic - Paracopy-mini . . . . . **not available**

THE YEAR OF THE BIG SCREEN





Will 1987 be the year projection TV comes of age? It's a darn good question. At least from the manufacturers' side, the message at the June CES will be clear: "We're playing for keeps." Showgoers will be treated to expanded pro-TV lineups from many majors who have only dabbled before, including RCA, North American Philips, and Panasonic. Veterans of the projection market, such as industry leader Mitsubishi and NEC, will advance their lines further with enhancements and bigger-yet screen sizes.

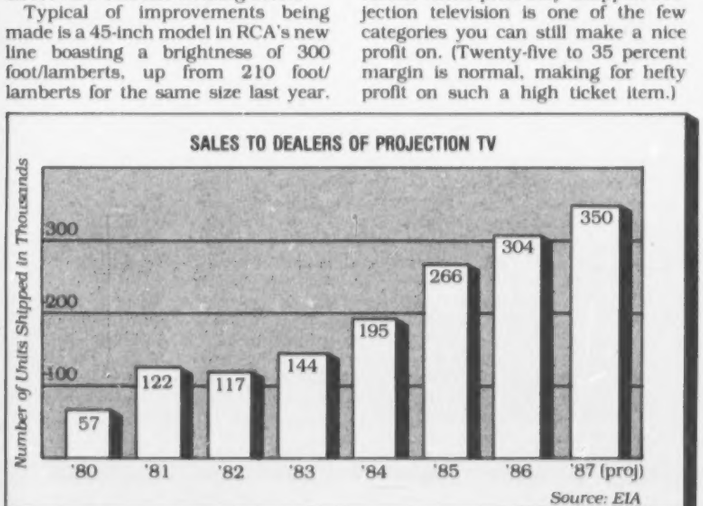
The products themselves are likely to surprise many. Projection technology has been advancing steadily, but manufacturers making a renewed commitment are doing so because they believe the '87 models rival direct-view sets like nothing before.

Typical of improvements being made is a 45-inch model in RCA's new line boasting a brightness of 300 foot/lamberts, up from 210 foot/lamberts for the same size last year. Similarly, NAP, which has added six new units in 3 screen sizes, claims significantly improved brightness, through a fully-redesigned projection system that uses no mirrors. And others will also show their latest technologies at CES: liquid coupled lenses that result in brighter, high contrast video; screens with ultra-wide viewing angles, etc.

That these firms are touting sophisticated new product comes as no surprise to execs at Mitsubishi, which has dominated the rear projection market since Day One with a no-compromise, price-be-damned policy. According to Mitsubishi national marketing manager Mike Stapleton, early units from his competitors used plastic lenses and smaller internal CRTs to save on cost and size, but they sacrificed brightness.

The niche customer for projection TV turned out to be more concerned with quality and more willing to pay for it. "We have always seen quality as the most important factor," says Stapleton. "Now it looks like the other companies are also getting the quality up."

As you'll soon read in this report, Mitsubishi has used this strategy to catapult itself to the dominant market share, while at the same time achieving higher selling prices and significantly higher profit margins for its dealers. But this isn't mentioned just to sing the praises of the market leader. The lesson is a valuable one: We are not talking about your average consumer, so don't treat him like a tunnel-vision price-only shopper. Projection television is one of the few categories you can still make a nice profit on. (Twenty-five to 35 percent margin is normal, making for hefty profit on such a high ticket item.)



So what's the catch? Same as always — you've got to make the commitment, both in floor space and display details. "The retailers having the most success are those who have made an effort to put at least three or four models out," explains Stan Gray, senior vice president of NEC Home Electronics. "They've legitimized the presence of the product on the floor."

Mitsubishi's Stapleton notes that dealers must do three things to be successful with the product: create a separate pro-TV area, raise it up on platforms so people view the sets as if they were sitting, and hook it into the best audio system you can muster (preferably surround-sound) to take advantage of the theater-like effect.

But even if dealers are lured in by the excellent new equipment, the pro-TV game may still be one for high-rollers — at least in '87. Despite the healthy year-to-year growth of dealer sales evident in the EIA figures, the market has proven itself an unpredictable beast. Early projections for this year spoke of 370,000 units being sold, up from 304,000 last year. But slow sales to dealers since December — possibly a result of consumer reaction to the new tax laws — have caused a revision downward by most in the industry to 350,000 units.

That volume would still be good for a 15 percent jump, but even that figure may be optimistic. Unless things pick up dramatically in the second half, Stapleton suggests the current rate of sale would yield about 320,000 units at year end.

Slow sales usually mean one thing. "We see the (manufacturers') inventory creeping up," says Stapleton, who claims that Mitsubishi has so far been immune to the problem. "It's a little frightening, because eventually someone is going to react to it and start dumping product, and that hurts the industry as a total."

The possibility of manufacturer price cuts this year is strenghtened even further by the strong desire of suppliers to quickly clear the pipeline of '86 stock, in order to start placing the '87s with retailers. Exposure to the improved quality of the new equipment is expected to be a key factor in retraining a consumer base that remembers all-too-well the earliest projection sets. "Many people have developed their perception from a TV they saw in a bar," says NEC's Gray. "Those sets may be as much as five or six years old now. Most of the problems with off-axis viewing and color shift are not problems anymore."

In any event, despite its drawbacks, product-dumping could also mean some good deals are around the corner for dealers.

Meanwhile, projection television faces some smaller problems common to categories in their infancy, including non-standard terminology and non-standard measuring techniques.

On the first point, a recent consumer study on projection television conducted by U.S. Precision Lens, a leading optics manufacturer, suggested that the industry will hinder its marketing efforts because its nomenclature for the product ranges from "large-screen" to "front-projection" and "rear-projection", *et al.* The term "projection TV" itself conjures up images of two-piece systems and is looked upon negatively by consumers, the report said. Further, it does not encompass the new generation of mammoth direct-view television, now becoming available. The study concluded, and Mitsubishi research confirms, that the term which covered all product and was most favorable to consumers was "big-screen TV."

Also dangerous, for both consumers and retailers, is the fact that no standard exists for measuring the foot/lambert value of screen brightness, perhaps the most important benchmark of a set's quality. According to suppliers, some manufacturers measure only at the screen's bright spot at the center, while others average the center in with readings taken near the corners. The only safe test between models, therefore, is a side-by-side visual comparison.

Yet another factor to add to this year's confusion is the emergence of the 30-inch and above direct view sets as an alternative to projection TV. However, as you'll read shortly, enough difference in price still exists between the two that — at least for now — they can comfortably coexist side-by-side on the retail floor.

All the caveats aside however, Gray at NEC quite expects this to be the year that many dealers will choose to give projection TV its first shot — if only to get that impressive cinematic screen out on the floor. "If the worst case condition is that the customer thinks the product has merit, but ends up stepping up to a 27-inch tabletop instead," he asks, "can the dealer be unhappy over that development?" □

Rob Sabin

Cores Corporation
MART

Dealers see big bucks in big-screen TV

Retailers of all stripes and sizes are hitting paydirt in the projection TV category. How do they do it?

Store manager Ron Horn in Ken Crane's Torrance showroom: "Projection TV is getting so popular, it practically sells itself."

What does it take to do a good job with projection TV?

To answer this question, MART surveyed four dealers — one on each coast and two in the Midwest — who are known for doing a big business in big-screen TV. The dealers ranged from an 8,000 square-foot independent to a 24-store chain — encouraging proof that retailers of all stripes can succeed in this high-ticket category.

Despite their size differences, the retailers showed marked similarities in their strategies for selling projection TV, out of which several generalizations emerge. One is that to be successful, retailers must make a commitment to the catogory, in terms of both dollars and floor space. All of the dealers surveyed carried at least a half dozen brands, and displayed no fewer than 15 to 20 different models on the floor.

Second, successful dealers make themselves known as "big-screen specialists," either through advertising or by providing a special service.

Finally, these retailers are able to deliver the nuts-and-bolts product knowledge that projection TV consumers demand.

Retail pricing, our respondents agree, ranks behind the above in importance in what is, after all, still a relatively untapped, unpromoted category. "Because projection TV is so new, consumers' minds haven't been set to a price point yet," says Robert Walsh, senior vice president/buyer at Tops Appliance City in Edison, New Jersey. But don't be lulled, cautions Mark Smith, sales manager at Chicago's Digital TV, because "they're getting there fast."

Here is a rundown of the four stores and their merchandising strategies:

Ken Crane's Home Entertainment City, *Los Angeles-Orange County, CA*
All of the chain's nine stores do well with big-screen TV, but the Torrance location does the best, moving an average of 30 units a month. Store manager Ron Horn attributes this to a massive floor display — 35 models, ranging from a 35-inch direct-view to a 15-foot diagonal, and covering a $1,300-$4,400 price spectrum. Brands include Mitsubishi, Zenith, Magnavox, NEC, Fisher, Pioneer and Kloss.

A large display is essential, says Horn, so customers can see for themselves the difference in picture quality. "Projection TV is getting so popular, it practically sells itself. All you have to do is show them a big selection and help them choose the right size and model for the intended application."

The sales presentation, says Horn, "boils down to measuring. We find out how far they'll be sitting from the screen, where the unit will be positioned in the room, *et cetera*. Knowledgeable advice is what sells for us."

The California chain also relies on promotions to stimulate projection TV sales. Every month, it advertises three or four models at about five percent off regular price. The ads draw customers, but "we still get most people through referrals," Horn says. "We're known for our selection and advice."

Recently, Mitsubishi's 35-inch, direct-view model has taken off at Crane's, and currently accounts for 20 percent of big-screen sales. But Horn doesn't see it replacing projection TV in the near future. "It costs $3,000, and you can get a much larger projection set for a couple hundred dollars less," he says.

Horn's advice to dealers: "Don't display projection TV in a totally dark room. I've seen many stores make that mistake, but customers would rather see them in more 'realistic' settings, where there's some light."

Tops Appliance City, *Edison, NJ*
In 1986, Tops sold an incredible 2,500 large-screen TVs — mostly out of one 45,000 square-foot store. (The company didn't open its second branch in Secaucus, New Jersey until December.)

Some of those sales, believe it or not, can be attributed to the success of certain local sports teams. "The Mets being in the World Series and the Giants in the Super Bowl helped us here in the New York area," comments senior vice president/buyer Robert Walsh.

Tops capitalized on last year's fall/winter demand for large-screen television by offering one of the largest selections in its market, backed by $1 million in inventory. The company showed 25 models from eight manufacturers, led by Mitsubishi, Sony and NEC. "The moth is drawn to the brightest flame," theorizes Walsh.

The company touts itself in newspaper ads as "big-screen headquarters," and also did some prime advertising. "We made advantageous purchases of labels that, although not so well known in the big-screen category, are brand-recognizable to the consumer, and we presented them at a very strong price point," Walsh explains. Among these were 37- and 40-inch Sylvania and Panasonic models, sale-priced at $1,297 and $1,397.

Although he moved "a lot" of promotional TVs, Walsh says many customers opted to step up to larger 45- to 50-inch models, or those with enhancements. Popular features desired by projection TV customers include stereo capability and doors. In cabinet style, "clean, contemporary light oak or medium walnut" sells best at Tops.

However, stresses Walsh, the most important selling feature is still "picture quality — as bright a screen as possible with the best peripheral vision."

Digital TV, *Chicago, IL*
This small independent just opened its doors in 1986, but sold 400 big-screen TVs last year. "We made a strong commitment to the category from the start," notes sales manager Mark Smith, who displays 15 models from eight manufacturers on his 8,000 square-foot sales floor.

The store also has an 8- x 12-foot demo room with couch and chairs, featuring a Pioneer Foresight audio/visual system with a 40-inch screen. Showing customers how projection TV looks in a typical livingroom setting has been helpful in closing sales, Smith reports. "The customer sees that screen can work in a small, home-type environment."

Another thing that's helped sales is Digital TV's unique service of designing customized audio/visual rooms. The store has built eight such rooms this year for customers — one in an attic. Including components, such a sale can carry a ticket as high as $12,000.

Because of Digital's service orientation, price is secondary to its large-screen customers, asserts Smith. "We do very well with Pioneer and NEC, which run a little higher than some," he says, disclosing that the store's typical margin on projection TV is 27 percent. And beyond the sale, Digital sells service contracts to 80 percent of its customers.

Tipton Centers, Inc., *St. Louis, MO*
This 24-store chain in Missouri, Iowa, Illinois, Kentucky and Tennessee moves over 2,000 big-screen sets a year, according to senior vice president of merchandising Gary Kaplan. Some locations feature as many as 20 models, displayed in a line running 100 feet. "People can look at them all at once and compare," explains Kaplan.

The high-impact display has converted many customers shopping for conventional TVs into big-screen buyers. But equally important, observes Kaplan, is the sales presentation given by employees. "It's step-up selling like anything else — you're selling the customer a better TV."

One very effective pitch has been to show the customer on a cost-per-month basis the difference between a conventional 25- or 26-inch TV and a projection model. "We compare the cost-per-month of each over a 10-year product lifespan, and the customer realizes that there isn't much of a difference between the two," Kaplan says. "Then we point out all he's getting for that difference — the bigger screen, the technology and the status of owning a projection TV. At that point, he's usually sold." □

Suzy Fucini

The pro-TV customer

As might be expected, retailers in the Cores test group agree that the big-screen consumer is predominantly male, in his thirties, with an income in the $30,000 to $39,000 bracket.

Regarding buying patterns, the Cores panel noted that the Christmas season was the most popular time among consumers for purchasing a projection television. December was cited as the best month by 40 retailers, November by 32 dealers, October by 19, September by 17 and January by 17.

One possible reason offered for a strong November is purchases made in anticipation of Thanksgiving weekend's TV sports and specials, which are often viewed by whole family gatherings. Likewise for January, which is SuperBowl month, and December has both Christmas and a possible Christmas bonus for some consumers to encourage a purchase.

Despite this, however, 1986 saw a dramatic decline of 27 percent in sales to dealers in December from the previous December, followed in turn by a -13 percent January and a -9 percent February, also down from the same months a year earlier.

Why didn't 1986's Christmas echo previous years and confirm the dealer survey? The culprit, Cores surmises, was probably income tax reform, which reassessed deductibility of certain kinds of personal finance. It is possible that confusion about the law may have made people uneasy about purchasing on credit, or convinced consumers to use their discretionary funds on purchases that had to be made before year end in order to avoid future tax penalties.

Over half of the retailers said that *less than 10 percent* of their sales were made to people who knew they wanted a projection television when they came in the store. This seems to indicate that projection-TV has tremendous impact on the floor, and consequently, has the ability to convince customers to impulsively step up to a major purchase. □

Methodology

The data provided in this special section was compiled by New York-based Cores Corporation, which conducts ongoing market research and consulting in consumer electronics and related industries. Sixty major retailers were contacted by Cores by telephone during November/December 1986 to participate in a study on the projection television marketplace. Respondents included store owners, managers, buyers and salespeople, who were asked a wide range of questions that enabled Cores to determine, among other things, product and pricing trends, profitability, customer preferences and strengths and weaknesses of brands carried by the study group.

The retailers were chosen to provide a mix of geographic regions covering the East, West, Midwest and South. Of the 60, 27 were audio/video stores, 18 were TV/appliance stores, and 15 were non-specialty (13 department stores, 2 discounters). 44 of the stores were part of a chain, 22 of these were in a chain with more than 20 outlets. Sales revenues for TV-related products exceeded $1 million for only 41 stores; the rest ranged from below $200,000 up to $1 million.

In addition to the above research, this report has been supplemented by recent interviews with projection television manufacturers and retailers conducted by MART's editorial staff.

Big screens, big profit

By today's standards, big-screen TV carries an unusually hefty profit margin. Of 45 dealers in the test group who discussed the topic with Cores, the majority had typically achieved projection TV margins between 25 and 50 percent. Specifically, 16 retailers had average margins in the 30-39 percent range; 16 retailers in the 25-29 percent range; 6 in the 20-24 percent range; 5 at 10-19 percent; and 2 at 1-9 percent. The mean profit margin among this group was 24.8 percent.

The chart below shows, by channel, profit margins achieved by some sample stores participating in the survey. Non-specialists included 13 department stores and two discounters. Mitsubishi, the market leader, is also shown separately, however, the mean profit margin listed on the left include Mitsubishi.

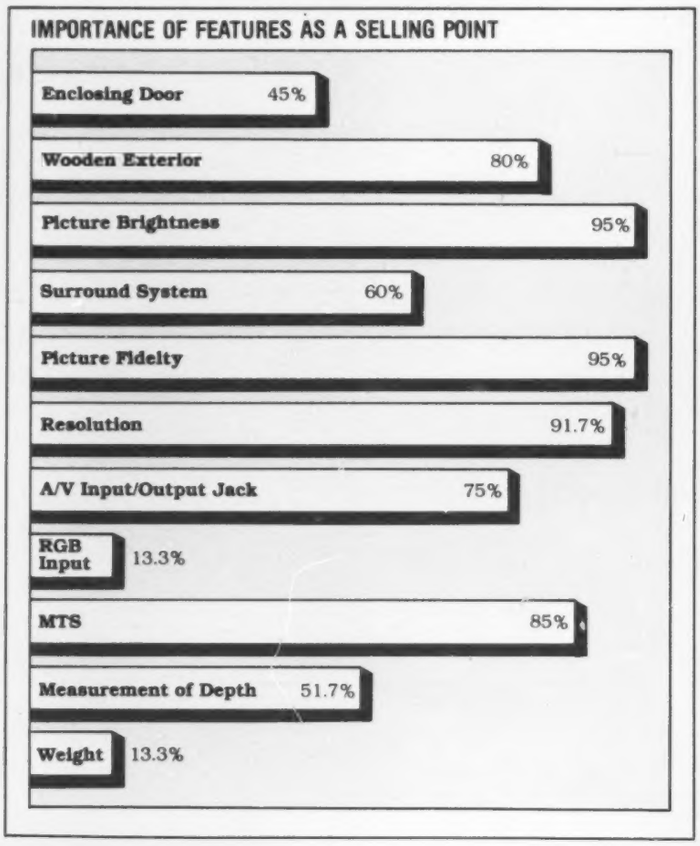
PROJECTION TV PROFIT MARGIN BY RETAIL CHANNEL

Dealer ID		Projection TV Overall	Mitsubishi	Brands Carried Other Than Mitsubish
A/V SPECIALIST STORE	1	20%	24%	Panasonic, Pioneer, Sony
	2	25%	25%	Panasonic
	3	30%	30%	Kloss
	4	35%	35%	Kloss, NEC, Fisher
	5	23%	26%	NEC, Sony
	6	21%	25%	Panasonic,Sony
	7	26%	26%	NEC, RCA
	8	27%	27%	Sony, Fisher
	9	25%	25%	Hitachi, Magnavox, Sony
	10	25%	25%	Kloss, NEC, Pioneer
	11	25%	30%	NEC, RCA, Zenith, Sony
		25.6%	27.1%	**MEAN** *
TV/APPLIANCE STORE	1	25%	25%	Hitachi, Magnavox, NEC, Pioneer, Sony
	2	32%	37%	Pioneer, Sony
	3	30%	36%	Hitachi, Kloss, NEC, Panasonic, Zenith, Sony
	4	22%	22%	Mitsubishi Only
	5	35%	35%	Panasonic, Pioneer
		28.8%	31%	**MEAN**
NON-SPECIALIST	1	35%	43%	Hitachi, NEC, Sony, Fisher
	2	28%	28%	Sony
	3	25%	28%	Sony
	4	28%	28%	Mitsbushi Only
		29%	31.8%	**MEAN**
		27.1%	29%	**OVERALL MEAN**

* *–Mean profit margin includes that of Mitsubishi.*

Features: What's hot, what's not . . .

The following shows projection television features and the percentage of dealers from among 60 in the test group who rated that feature either "extremely important" or "somewhat important" as a selling point.



Pricing trends

Retailers in the Cores study group reported in December the following selling price spreads for their best-selling brands: 39-in. and under, $2,000; 40- to 42-in., $2,000 -$2,300; 45- to 47-in., $2,700 -$3,200; and 50-in. and over, $3,700 - $3,800.

It's interesting to note that these spreads are weighted slightly higher than they might otherwise be because of higher price ceilings reported by the 34 Mitsubishi dealers in the group. Cores has confirmed that retailer newspaper ads studied in December for the ongoing Cores Marketing Index, showed that Mitsubishi's average selling price for projection TV in all categories — $2,414.80 — was 16 percent higher than the industry's overall average at $2,073.78.

According to the study group, selling prices in general have declined for the best selling brands in the most popular categories. Asked to compare prices in December with those one year earlier, the retailers reported the most dramatic decline in the over 50-in. screen size, which dropped an average 7.7 percent, from $3,642 to $3,363. The key category of 40 to 42 in. declined 5 percent from $2,503 to $2,378; similarly, 45- to 47-in. screens dropped 7.4 percent from $2,897 to $2,683. Marginal increases in price were reported for front projection and 35-in. direct view sets. □

Is bigger better?

According to Cores and *Television Digest*, sales of the largest screens as a percentage of the whole are expected to grow in 1987.

1986	Share	1987	Share
36- to 39-inch	20%	36- to 39-inch	9%
40- to 44-inch	40%	40- to 44-inch	38%
45-inch and over	40%	45-inch and over	53%

Editorial Feedback
Please circle the appropriate number on the Retailer Service Card. Do you sell projection TV sets?

YES—357 *NO—358*

What should you carry?

Why do retailers carry projection television? Customer demand was the reason noted by 76.7 percent of dealers on the Cores test panel. Other reasons, in order, were large profit margin (33.3 percent), sales turnover (21.7 percent), manufacturer push (6.7 percent) and "other" (13.2 percent).

The most popular products among the dealers were rear projection sets with 40- to 47-inch screens (carried by 55 of 60 dealers), which correlates with the two best selling categories reported. These were followed by screens 39-inches and under carried by (45 dealers) and 50-inches and over (29 dealers). However, among 10 retailers who said they would soon drop some pro-television product, 39-inch and under was cited by four dealers.

Front projection TV was the least popular product, carried by about a third of the retailers (21 dealers). It should also be noted that 44 dealers, or three quarters, carried direct-view television measuring 29-inches and over.

The 60 retailers displayed a total of 326 units among them, for a mean of 5.4 units displayed per store. The pro-TV display was most commonly found on a wall far away from the store entrance (19 dealers), followed by a demo room (18), the center of the floor (10) and near the entrance (10).

The average number of brands carried by dealers in the group was 3.6. The most popular brands, by a significant margin, were Sony, carried by 37 dealers, and Mitsubishi, carried by 34. These were the only brands carried by more than half of the test group.

Though both brands were carried across all three types of stores listed (A/V, TV/appliance, and department/discount store), Sony's distribution was strongest among small- to mid-level independents, while Mitsubishi's strength was in chains with 81 million or more in TV-related products. This explains stronger total Mitsubishi sales despite a greater number of Sony dealers within the group.

The brands and number of stores carrying each were: Sony (37), Mitsubishi (34), RCA (22), Zenith (22), NEC (21), Panasonic (15), Fisher (15), Hitachi (14), Pioneer (10), Magnavox (9), Kloss (8), Sharp (4), Quasar (4). □

Best selling brands . . .

Below, for each projection TV category (plus 35-inch direct view) are the best selling brands as reported by the 60 retailers in the Cores test group.

BEST SELLING BRANDS BY CATEGORY

Brand	*	Price Range	Reasons It Sold Best
PROJECTION TV - 39" and UNDER			NUMBER OF DEALERS: 45
Mitsubishi	19	1750-2100	Price (9), Reputation (9), Quality (8)
Sony	10	2200-2800	Quality (6), Price (4), Reputation (3)
Quasar	3	1495-2195	Price (2), Features (2)
PROJECTION TV - 40" - 42"			NUMBER OF DEALERS: 55
Mitsubishi	28	2199-3200	Reputation (18), Quality (12), Features (9)
Sony	10	1999-3400	Reputation (5), Quality (5), Price (3)
Pioneer	4	2795-3200	Quality (2), Features (2)
PROJECTION TV - 45" - 47"			NUMBER OF DEALERS: 55
Mitsubishi	28	2488-3288	Reputation (18), Quality (15), Features (6)
Sony	7	2200-2999	Reputation (5), Quality (3), Price (2)
RCA	5	1899-2199	Quality (3), Price (3), In-store Promo (2)
NEC	4	2695-3000	Price (2)
Zenith	4	1699-2500	Price (3), Reputation (2)
PROJECTION TV - 50" - and OVER			NUMBER OF DEALERS: 29
Mitsubishi	22	3000-3800	Quality (11), Reputation (9), Price/Features (7)
Hitachi	5	2097-2500	Price (3)
FRONT PROJECTION TV			NUMBER OF DEALERS: 21
Kloss	8	3299-4200	Quality (5), Features (3), Size/Width (3)
Mitsubishi	4	2000	—
Zenith	4	1600-2100	Price (2)
DIRECT VIEW COLOR TV - 35"			NUMBER OF DEALERS: 44
Mitsubishi	24	2999-3499	Quality (11), Reputation (11), Price (7)
Fisher	6	3300-3499	Quality (3), Features (2)
Sharp	5	2988-3195	Quality (3), Features (3), Price (2)

**-Number of dealers who cited brand as best seller.* *( )-Number of citations.*

Brand evaluations

The sixty retailers on the Cores test panel were asked to rate their suppliers on a variety of subjects, covering product quality, perceived customer demand, and a variety of marketing factors such as advertising and promotional support, quality of sales representatives and others. Their responses, ranging from "excellent" to "very poor" for each category, were then tabulated according to the key below. Based on the scores, a rating number from +10 to −10 was attributed to each brand for each category. This chart shows, as of December, the perceived strengths and weaknesses of each projection TV brand, as rated by the dealers who carried them.

It should be noted that Kloss Video, though initially included in the survey questionaire, was eliminated when 3 of 8 Kloss dealers declined to respond. The difference in the Kloss product line, which is primarily front projection, was also considered. However, the five remaining Kloss dealers rated the firm very highly, its overall score reaching 5.63, exceeding that of Mitsubishi. Kloss scored particularly well for product quality, value for money, delivery time, sales rep/personnel and profit margin. Shortcomings focused upon limited advertising activities and features.

DEALERS' BRAND EVALUATION

Brand	*	Overall	Product Quality	Features	Value for Money	Product Mix/Line	Cosmetic Design	Ads Activities	Promotion	Delivery Time	Sales Rep.	Parts/Repair	Information	Customer Demand	Profit Margin
Mitsubishi	34	5.08	8.10	8.05	6.25	6.90	6.95	1.25	2.80	0.15	3.40	4.65	4.05	7.75	5.70
RCA	22	4.00	3.40	5.45	4.50	3.75	3.85	5.25	4.15	6.15	4.50	4.15	3.75	3.40	-0.30
Pioneer	10	3.91	7.80	7.80	3.90	0.55	5.00	2.80	3.55	3.35	4.40	3.35	1.65	3.35	3.35
Sony	37	3.83	7.00	7.45	3.55	3.15	5.45	3.45	2.15	2.00	3.30	2.05	4.10	6.15	0.00
NEC	21	3.55	5.55	7.10	5.85	3.40	4.45	0.55	1.25	2.90	5.60	3.35	2.95	0.55	2.65
Zenith	22	3.46	5.00	4.30	4.05	2.60	3.10	2.90	1.75	5.00	4.25	3.75	4.50	3.55	0.25
Hitachi	14	2.50	5.70	5.00	4.25	2.50	2.50	-1.05	1.65	3.55	2.15	2.70	2.85	0.00	0.75
Fisher	15	1.87	1.55	4.25	4.25	1.55	1.90	2.90	2.90	1.90	0.00	-1.15	-1.15	0.40	5.00
Magnavox	9	1.81	2.20	3.35	4.45	-1.25	3.35	1.65	1.00	1.65	3.55	2.50	2.15	-1.10	0.00
Panasonic	15	1.65	3.35	3.00	3.00	1.65	2.35	0.70	0.40	3.65	3.35	1.65	1.05	-1.00	-1.65

Key: Score weighted by allotting +10 to "excellent," +5 to "good," 0 to "fair," −5 to "poor," and −10 to "very poor."
The sum of the total was then divided by the number of responses.

**Number of dealers*